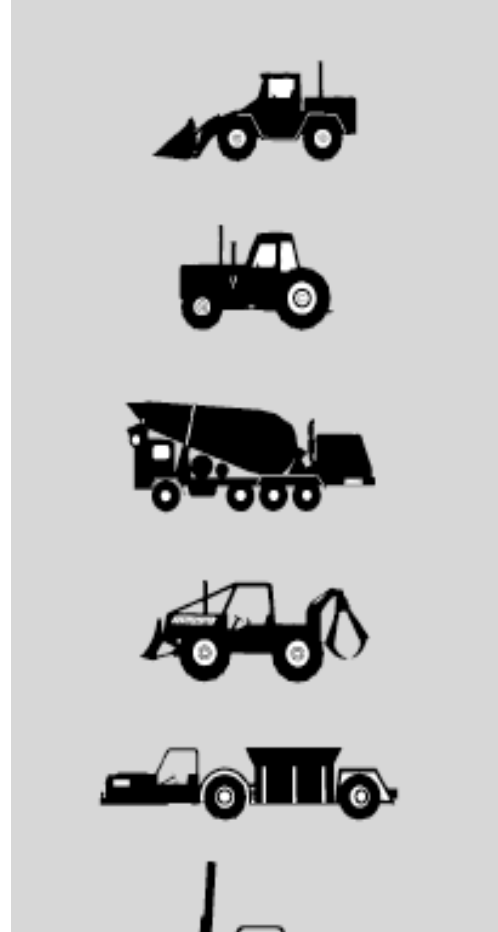


# Transmission Controller Systems Model APC160



***SPICER OFF-HIGHWAY PRODUCTS***

# APC160 TRANSMISSION CONTROLLER SYSTEMS

The **APC160** advanced programmable control system brings a new level of technology to serve the standard powershift transmission families.

It can be used with any non-ECM Spicer® powershift transmission to provide drivetrain protection and load-sensed automatic shifting. The **APC160** is equipped with a 4 digit display that provides detailed information about relevant driving conditions, and displays trouble codes when the on-board diagnostics feature is activated.

The FLASH memory feature in the **APC160** records pertinent statistical information related to the vehicle's operating history and makes it available for later consulting by a service engineer. Shift points and other operating parameters can be optimised by the customer by means of a user-friendly, PC-based, graphical parameter editor. These optimised parameter sets can also be maintained on a remote PC for later use for customisation of new vehicle production for specific customer/application requirements.

In addition to providing all of the features available with the APC50 and APC70 platforms, the **APC160** supports SAE J1939 and customer specific CAN 2.0B protocols facilitating vehicle networking. Integration with other compatible on-board systems keeps the total system cost low through elimination of redundancy and by reducing the amount of copper required to implement the system. Customized CAN-bus implementations allow seamless integration with the central vehicle display providing a common user interface to all vehicle functions including the transmission controller.

Thanks to its proportional control capability, the **APC160** can be further put to work in applications requiring integrated use of transmission, engine and brakes for precise vehicle control under the most demanding conditions.

Further, advanced tools for system optimisation and troubleshooting as well as tools to support end-of-line programming are available.

## Controller Systems Capabilities Matrix

Function / Feature	EGS50	APC50	EGS70	APC70	APC160	APC200
Drive Train Protection	✓	✓	✓	✓	✓	✓
Speed Sensed Automatic Shift	✓	✓	✓	✓	✓	✓
Load Sensed Automatic Shift			✓	✓	✓	✓
Electronically Controlled Clutches			✓	✓		✓
Electronic Inching						✓
Hydrostatic Pump & Motor Control				✓	✓	✓
Electronically Controlled Braking					✓	✓
Engine Servo Control					✓	✓
Seering Axle Control		✓			✓	✓
Diagnostics	✓	✓	✓	✓	✓	✓
End-User Parameter Tuning	✓	✓	✓	✓	✓	✓
Integrated Shift Lever	✓		✓			
Display	8 LED	2 Digit	8 LED	2 Digit	4 Digit	4 Digit
Analog Control			✓	✓	✓	✓
CAN Network Integration			2.0A	2.0A	2.0B	2.0B
ASAE J/1939 Compliant					✓	✓
Sealing	IP66	IP65	IP66	IP65/66	IP66	IP66

### APPLICATION POLICY

Capability ratings, features and specifications vary depending upon the model type of service. Application approvals must be obtained from Spicer Off-Highway Products Division. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.



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